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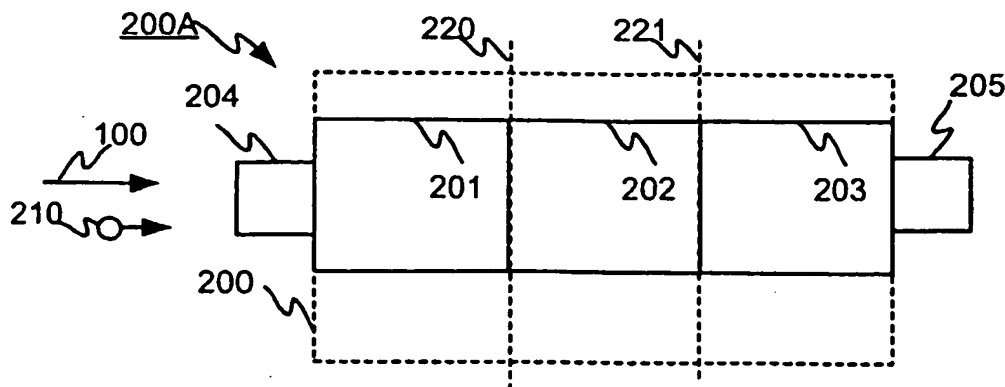
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Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A CELL STRUCTURE, DEVICE AND METHODS FOR GAS ANALYSIS



(57) Abstract: The invention relates to a gas analysis based on the mobility of ions. The invention relates to a cell structure of an analysis device, the cell structure comprising the reference cell (201), the ionisation section (202) and the analysis cell (203) for identifying the electric mobility of ions. The invention also relates to a method for identifying the ions. Further, the invention relates to a system for identifying the ions.



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INTERNATIONAL SEARCH REPORT

International application No.
PCT/IS03/00226**Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see extra sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☒ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

Box II

Invention 1:

The invention according to claims 1-26 relates to a cell structure, device, system and method for identifying of matter contents in gases based on ions electrical mobility, where the gas is transported through the flow channel including a reference cell, an ionization cell and an analysing cell and two electrical fields are applied.

Invention 2:

The invention according to claims 27-28 relates to a method for determining flow speed of a gas based on changes of charges of three pairs of electrodes during applying of three electrical fields.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 03/00226

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: G01N 27/62, G01P 5/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: G01N, G01P, G01F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5475217 A (ROBERT F.D. BRADSHAW), 12 December 1995 (12.12.95), column 3, line 51 - line 57, claims 8,9,10, abstract --	1-26
A	WO 9416320 A1 (ENVIRONICS OY), 21 July 1994 (21.07.94), claim 1, abstract --	1-26
A	WO 8707720 A1 (FPUUMALAINEN PERTTI), 17 December 1987 (17.12.87), claim 1, abstract --	1-26

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "I" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

4 Sept 2003

Date of mailing of the international search report

05 -09- 2003

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International application No.

PCT/FI 03/00226

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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